IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of	) **MAIL STOP AMENDMENT**
Bas Ording	) Group Art Unit: 2628
Application No.: 09/754,147	) Examiner: Kimbinh T. Nguyen
Filed: January 5, 2001	) Confirmation No.: 3465
For: TIME-BASED, NON-CONSTANT TRANSLATION OF USER INTERFACE OBJECTS BETWEEN	)

REQUEST FOR RECONSIDERATION

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Office Action dated July 17, 2006, Applicant respectfully requests reconsideration of the rejections of the claims. The withdrawal of the previous grounds of rejection is noted with appreciation.

Claims 1-5, 7, 8, 10, 14-17, 19-21, 25 and 26 were rejected under 35 U.S.C. § 103, on the basis of the previously-cited Chang et al. publication entitled "Animation: From Cartoons to the User Interface", in view of the newly-cited Elliott et al patent (US 5,764,241). Claims 11, 22 and 27 were rejected on the basis of these two references, in further view of the IBM Technical Disclosure Bulletin entitled "Window Closing Animations", and claims 12, 13, 23, 24, 28 and 29 were rejected on the basis of the Chang and Elliott references, in further view of the Ellison-Taylor patent (US 5,796,402). For the reasons presented below, it is respectfully submitted that these references do not suggest the claimed subject matter to a person of ordinary skill in the art.

In rejecting claim 1, the Office Action initially characterizes the Chang publication as follows:

> Chang teaches a method for moving an object in a graphical user interface, comprising the steps of a) determining a path of movement for the object along at least one axis, *and a period of time for the movement along said path...*; b) establishing a non-constant velocity function along said axis *for said period of time...*; c) calculating an instantaneous position for the object along said path in accordance with said function *and the relationship of a current time value to said period of time...*; d) displaying said object at said calculated position...; and e) iteratively repeating steps (c) and (d) *during said period of time...* (emphasis added)

However, in the very next sentence, the Office Action states that the Chang publication does not teach "determining a period of time, a non-constant velocity function of the period of the time, calculating an instantaneous position for the object along said path in accordance with said function and the relationship of the current time value to said period of time." These two statements are inconsistent with one another, particularly with respect to the highlighted portions of the first quote appearing above. As such, it is not clear from the Office Action precisely what the Chang reference is being relied upon to teach.

As pointed out in Applicant's previous responses, the Chang reference discloses a user interface that employs cartoon animation principles in the display of user interface objects. In particular, in Section 2.3.1 (pages 50-51) it discloses a technique that is referred to as "slow in and slow out", to give a feeling of weight to objects and physicality to their movement. The Chang reference is silent as to how this slow in and slow out animation effect is achieved in a user interface. Specifically, it does not disclose that the successive positions of a moving object are calculated with reference to a determined period of time.

Recognizing a lack of teaching in the Chang reference, the Office Action relies upon the Elliott patent for its disclosure of the use of time as a parameter for determining the behavior of an object. It is respectfully submitted, however, that the Elliott patent does not disclose the claimed features that are missing from the Chang reference. Furthermore, the Office Action does not provide a sound basis for applying any of the teachings of the Elliott patent to the disclosed technique of the Chang reference.

The Office Action appears to primarily rely upon the Elliott patent for its disclosure at column 11, lines 13-65. This portion of the patent relates to the display of a three-dimensional model of a graphical object representing a bust (column 9, lines 59-60). In the cited passage, this bust has two behavioral parameters associated with it, namely "hue", i.e. its color, and "angle", its rotational position about the Y axis. As described at column 11, lines 23-28, the "angle" parameter varies as a function of time, between plus and minus 45 degrees, causing the head to oscillate back and forth.

It is not apparent from the Office Action how this teaching would be applied to the slow in and slow out technique of the Chang reference. Specifically, the Chang reference is not concerned with rotation of an object about an axis. Rather, it discloses that the slow in and slow out movement is applied to the growth or shrinking of object, boxes entering and exiting off screen, and the dissolving of an object. The Elliott patent's disclosure relating to the angular rotation of a three-dimensional bust about a vertical axis does not have any applicability to these types of actions. Accordingly, it is respectfully submitted that a person of ordinary skill in the art would not have any reason to apply teachings from the Elliott patent to the slow in and slow out technique of the Chang reference.

As a purported basis for combining the references, the Office Action states that "it would allow a user to describe behavior that varies in response to discrete events." It is not seen how this statement applies to the slow in and slow out technique of the Chang reference. At column 12, lines 2-9, the Elliott patent describes mouse clicks and state changes as examples of such discrete events. The Chang reference is not concerned with reacting to these types of events as an object is moving. Rather, its objective is to reinforce the illusion of reality in the movement of the objects. Reacting to mouse clicks or the like does not have any applicability to this objective. As such, there is no reason for a person to apply the teachings of the Elliott patent to the Chang reference.

Furthermore, and perhaps more significantly, it is respectfully submitted that the Elliott patent does not disclose claimed subject matter that is missing from the Chang

reference. For example, claim 1 recites a method for moving an object in a graphical user interface, in which the first step comprises determining a path of movement for the object at least along one axis, "and a period of time for the movement along said path". Another step recited in claim 1 is that of calculating an instantaneous position for the object along the path in accordance with a non-constant velocity function "and the relationship of a current time value to said period of time". In other words, the calculation of the position employs both the current time value and the period of time that was determined for the movement of the object along the path. Claim 14 recites similar subject matter.

As noted previously, the Chang reference does not disclose these claimed steps. Furthermore, the Office Action does not explain where they can be found in the Elliott patent. Applicant respectfully submits that the patent does not disclose them. If the rejection of claims 1 and 14 is not withdrawn, the Examiner is requested to identify, with specificity, the passage in the Elliott patent that is considered to teach "determining… a period of time for the movement [of the object] along said path", and where it discloses "calculating an instantaneous position for the object along said path in accordance with… the relationship of a current time value to said period of time". Furthermore, the Examiner is requested to explain how such teachings, if they exist, would be used to modify the disclosure of the Chang reference.

Claim 5 recites a method for moving an object which includes the step of displaying the object at sequential positions along the path from a starting location to a final location at increments of time. In rejecting this claim, the Office Action alleges that the Chang reference discloses that the object is displayed at sequential positions along a path from a starting location to a final location at increments of time, with reference to Figures 8 and 9. However, the Chang reference does not contain any disclosure regarding the relationship of the different position of the object relative to *time*. It only discloses that the objects are moved more slowly at the beginning and end of the movement, than during the bulk of the movement. It does not disclose whether, or how, successive positions of the object are

calculated with respect to a time reference. Accordingly, it is respectfully submitted that the rejection of claim 5 is not supported by the reference, as characterized in the Office Action. For the same reasons, claims 8 and 17 are submitted to be allowable over the references.

Claim 20 recites a user interface for a computer that includes, among other elements, means responsive to a user action for selecting a second location to which an object is to be moved "and period of time during which the movement is to occur". Claim 25 recites analogous subject matter. For reasons similar to those discussed in connection with claims 1 and 14, it is respectfully submitted that the subject matter of claims 20 and 25 is also patentably distinct from the references. Specifically, neither the Chang reference nor the Elliott patent discloses the feature of selecting a period of time during which the movement of an object from a first location to a second is to occur.

In addition to the foregoing differences, other distinguishing features are recited in the dependent claims. For instance, claim 4 recites the steps of determining the amount of elapsed time since the beginning of the determined period, and calculating the ratio of the elapsed time to the total period of time. This ratio is used to determine a translation factor that controls the instantaneous position of the object along the path. Although the Office Action alleges that this subject matter is disclosed in the Elliott patent, at column 11, lines 23-65, Applicant is unable to find any support for this allegation. If the rejection is not withdrawn, the examiner is requested to explain how the patent is being interpreted to disclose the claimed steps. For instance, where does it disclose the claimed ratio, and what constitutes the translation factor?

Claim 12 recites that the user action which causes an object to be moved is the removal of an object from a series of objects, and claim 13 recites that it is the insertion of an object into a series of objects. In rejecting these claims, the Office Action relies upon the Ellison-Taylor patent. It is respectfully submitted that this patent has nothing to do with the insertion or removal of objects from a series of objects. Rather, it is directed to a particular type of tiling technique, in which *existing* objects are expanded to fill the area of the screen.

It does not relate to the insertion of an object into the existing objects, or the removal of one of the existing objects, let alone what happens when such an action occurs.

For at least the foregoing reasons, it is respectfully that all pending claims are allowable over the Chang reference and the Elliott patent, even if their respective teachings could somehow be combined. Reconsideration and withdrawal of the rejections is respectfully requested.

Respectfully submitted,

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